SANITARY FACILITIES
Franklin County, Kansas

Sanitary Facilities

The following tables show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A trench sanitary landfill is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

SANITARY FACILITIES
Franklin County, Kansas

In an area sanitary landfill, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
003DB:					
Dennis	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.09
		Depth to saturated zone	1.00	Depth to soft bedrock	0.05
		Depth to bedrock	0.47		
003EC:					
Eram	90	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	0.91
		Depth to saturated zone	1.00		
003LA:					
Lanton	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	1.00	Depth to saturated zone	0.00
		Depth to saturated zone	1.00		
031EC:					
Eram	90	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	0.67
		Depth to saturated zone	1.00		
139CM:					
Clareson	55	Very limited		Very limited	
		Restricted permeability	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.53	Content of large stones	0.88
		Slope	0.04		
Eram	30	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Depth to saturated zone	1.00		
		Slope	0.00		
602CB:					
Catoosa	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
602CM:					
Clareson	60	Very limited		Very limited	
		Restricted permeability	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.91	Content of large stones	0.79
		Slope	0.37	Seepage	0.32
Rock Outcrop	20	Not rated		Not rated	
602LA:					
Lanton	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	1.00		
		Depth to saturated zone	1.00		
602VC:					
Verdigris	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
1366:					
Clareson	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Restricted permeability	1.00	Slope	1.00
		Content of large stones	0.89	Content of large stones	0.58

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
		Slope	0.04	Seepage	0.32
Rock Outcrop--------	20	Not rated		Not rated	
2326:					
Kenoma--------------	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.09
		Depth to saturated zone	1.00		
2540:					
Leanna--------------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	1.00		
		Depth to saturated zone	1.00		
3494:					
Summit--------------	85	Very limited		Very limited	
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.09
3815:					
Verdigris-----------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
3816:					
Verdigris-----------	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
3951:					
Woodson-------------	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.00
		Depth to saturated zone	1.00		
AED:					
Arents, Earthen Dam-	100	Not rated		Not rated	
Bc:					
Bates---------------	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
				Seepage	0.50
				Slope	0.09
Bd:					
Bates---------------	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Slope	0.67
				Seepage	0.50
Collinsville--------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	1.00
				Slope	0.67
Bh:					
Bates---------------	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Slope	1.00
		Slope	0.00	Seepage	0.50
Collinsville--------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.16	Seepage	1.00
				Slope	1.00
Bo:					
Bolivar-------------	65	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
Hector--------------	25	Very limited		Very limited	

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	1.00
				Slope	0.33
Bs:					
Bolivar	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Slope	1.00
		Slope	0.04	Seepage	0.50
Hector	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.04	Seepage	1.00
				Slope	1.00
Cm:					
Clareson	55	Very limited		Very limited	
		Restricted permeability	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.81	Content of large stones	0.99
		Slope	0.04	Seepage	0.32
Eram	30	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Depth to saturated zone	1.00		
		Slope	0.00		
Dc:					
Dennis	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.33
		Depth to saturated zone	1.00		
Dn:					
Dennis	60	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.33
		Depth to saturated zone	1.00		
Bates	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
Do:					
Dennis, eroded	60	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.67
		Depth to saturated zone	1.00		
Bates, eroded	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Slope	0.67
				Seepage	0.50
Ea:					
Eram	55	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	0.16		
Lebo	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.50	Slope	1.00
		Slope	0.16	Seepage	0.50
Ec:					
Eram	60	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to bedrock	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.67
Lula----------	25	Somewhat limited		Somewhat limited	
		Depth to bedrock	0.96	Depth to hard bedrock	0.88
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.33
INT:					
Aquolls----------	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
Ke:					
Kenoma----------	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.09
Le:					
Leanna, drained-----	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	1.00		
		Depth to saturated zone	1.00		
Ln:					
Lebo----------	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Rock Outcrop--------	15	Not rated		Not rated	
Lo:					
Lula----------	90	Somewhat limited		Somewhat limited	
		Restricted permeability	0.50	Seepage	0.50
		Depth to bedrock	0.41	Depth to hard bedrock	0.02
LU:					
Lula----------	85	Somewhat limited		Somewhat limited	
		Depth to bedrock	0.96	Depth to hard bedrock	0.88
		Restricted permeability	0.50	Seepage	0.50
				Slope	0.00
M-W:					
Miscellaneous Water-	100	Not rated		Not rated	
Mb:					
Mason----------	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Flooding	0.40
		Flooding	0.40		
Oe:					
Olpe----------	55	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.09
Kenoma----------	30	Very limited		Very limited	
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.09
Os:					
Osage----------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
Ov:					
Osage----------	90	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Restricted permeability	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to saturated zone	1.00		
Pt:					
Pits, Quarries	100	Not rated		Not rated	
Sn:					
Summit	100	Very limited		Somewhat limited	
		Restricted permeability	1.00	Depth to saturated zone	0.81
		Depth to saturated zone	1.00	Slope	0.00
So:					
Summit	90	Very limited		Very limited	
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.67
Vb:					
Verdigris	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
Vc:					
Verdigris	88	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Restricted permeability	0.50	Seepage	0.50
W:					
Water	100	Not rated		Not rated	
Wb:					
Welda	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.50
				Slope	0.33
Wo:					
Woodson	90	Very limited		Not limited	
		Restricted permeability	1.00		
		Depth to saturated zone	1.00		
Wt:					
Woodson	100	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.00
		Depth to saturated zone	1.00		

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
003DB:							
Dennis	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.05	Depth to saturated zone	1.00
		Too clayey	1.00			Hard to compact	1.00
		Seepage	1.00			Depth to bedrock	0.05
003EC:							
Eram	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Depth to saturated zone	1.00
		Seepage	1.00			Hard to compact	1.00
003LA:							
Lanton	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50				
031EC:							
Eram	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Depth to saturated zone	1.00
		Seepage	1.00			Hard to compact	1.00
139CM:							
Clareson	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.04	Hard to compact	1.00
		Content of large stones	0.53			Content of large stones	0.53
		Too clayey	0.50			Too clayey	0.50
		Slope	0.04			Slope	0.04
Eram	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Slope	0.00	Too clayey	1.00
		Seepage	1.00			Hard to compact	1.00
		Slope	0.00			Slope	0.00
602CB:							
Catoosa	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00			Too clayey	0.50
		Too clayey	0.50				
602CM:							
Clareson	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Seepage	1.00			Hard to compact	1.00
		Content of large stones	0.91			Content of large stones	0.91
		Slope	0.37			Slope	0.37
Rock Outcrop	20	Not rated		Not rated		Not rated	
602LA:							
Lanton	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
602VC:							
Verdigris	85	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
1366:							
Clareson	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	1.00	Slope	0.04	Too clayey	1.00
		Seepage	1.00			Hard to compact	1.00
		Content of large stones	0.89			Content of large stones	0.89
		Slope	0.04			Slope	0.04
Rock Outcrop	20	Not rated		Not rated		Not rated	

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2326:							
Kenoma	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
2540:							
Leanna	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
3494:							
Summit	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to saturated zone	0.47
3815:							
Verdigris	85	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
3816:							
Verdigris	90	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
3951:							
Woodson	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
AED:							
Arents, Earthen Dam	100	Not rated		Not rated		Not rated	
Bc:							
Bates	90	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00				
Bd:							
Bates	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00			Too clayey	0.50
		Too clayey	0.50				
Collinsville	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00			Seepage	0.50
Bh:							
Bates	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.00	Slope	0.00
		Slope	0.00				
Collinsville	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.16	Seepage	0.50
		Slope	0.16			Slope	0.16
Bo:							
Bolivar	65	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00				
Hector	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00			Seepage	0.50
Bs:							
Bolivar	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.04	Slope	0.04
		Slope	0.04				
Hector	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.04	Seepage	0.50
		Slope	0.04			Slope	0.04
Cm:							
Clareson	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.04	Hard to compact	1.00
		Content of large stones	0.81			Content of large stones	0.81
		Too clayey	0.50			Too clayey	0.50
		Slope	0.04			Slope	0.04
Eram	30	Very limited		Very limited		Very limited	

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Slope	0.00	Too clayey	1.00
		Seepage	1.00			Hard to compact	1.00
		Slope	0.00			Slope	0.00
Dc:							
Dennis	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
Dn:							
Dennis	60	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Depth to saturated zone	1.00
						Hard to compact	1.00
Bates	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00				
Do:							
Dennis, eroded	60	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Depth to saturated zone	1.00
						Hard to compact	1.00
Bates, eroded	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00			Too clayey	0.50
		Too clayey	0.50				
Ea:							
Eram	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Slope	0.16	Too clayey	1.00
		Seepage	1.00			Hard to compact	1.00
		Slope	0.16			Slope	0.16
Lebo	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.16	Too clayey	0.50
		Too clayey	0.50			Slope	0.16
		Slope	0.16				
Ec:							
Eram	60	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
		Seepage	1.00			Hard to compact	1.00
Lula	25	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	0.88	Hard to compact	1.00
		Seepage	1.00			Depth to bedrock	0.88
		Too clayey	0.50			Too clayey	0.50
INT:							
Aquolls	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Seepage	1.00				
Ke:							
Kenoma	90	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
Le:							
Leanna, drained	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Too clayey	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Hard to compact	1.00
Ln:							
Lebo	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Seepage	1.00			Gravel content	0.92
		Too clayey	0.50			Too clayey	0.50

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Rock Outcrop--------	15	Not rated		Not rated		Not rated	
Lo:							
Lula----------	90	Very limited		Somewhat limited		Somewhat limited	
		Depth to bedrock	1.00	Depth to bedrock	0.02	Too clayey	0.50
		Seepage	1.00			Depth to bedrock	0.02
		Too clayey	0.50				
LU:							
Lula----------	85	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	0.88	Hard to compact	1.00
		Seepage	1.00			Depth to bedrock	0.88
		Too clayey	0.50			Too clayey	0.50
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
Mb:							
Mason----------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Flooding	0.40	Too clayey	0.50
		Flooding	0.40				
Oe:							
Olpe----------	55	Somewhat limited		Not limited		Very limited	
		Too clayey	0.50			Hard to compact	1.00
						Gravel content	0.97
						Too clayey	0.50
Kenoma----------	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
Os:							
Osage----------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
Ov:							
Osage----------	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
Pt:							
Pits, Quarries------	100	Not rated		Not rated		Not rated	
Sn:							
Summit----------	100	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Depth to saturated zone	0.19	Too clayey	1.00
		Depth to saturated zone	0.86			Hard to compact	1.00
						Depth to saturated zone	0.47
So:							
Summit----------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to saturated zone	0.86
Vb:							
Verdigris----------	85	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
Vc:							
Verdigris----------	88	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
W:							
Water----------	100	Not rated		Not rated		Not rated	
Wb:							
Welda----------	90	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
Wo:							
Woodson----------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to saturated zone	1.00

SANITARY FACILITIES--Continued
Franklin County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wt:							
Woodson	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to saturated zone	1.00